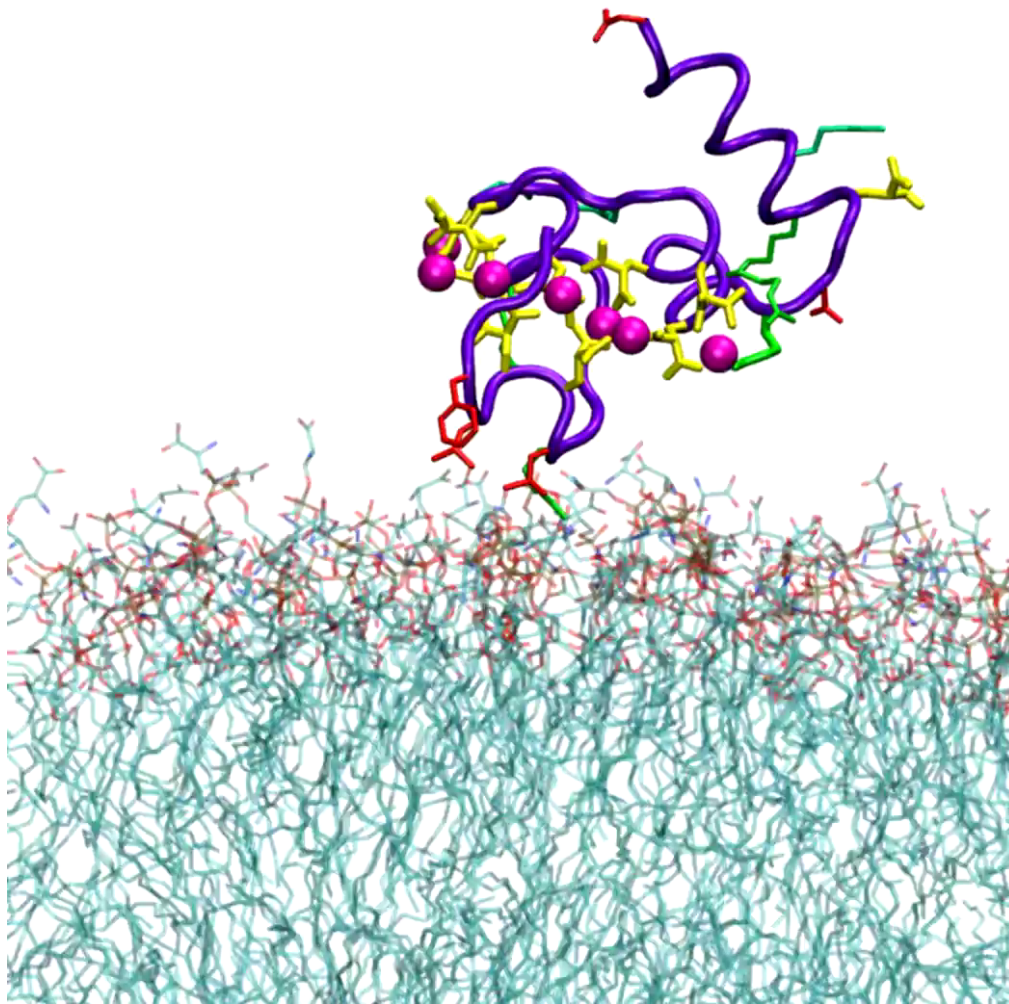


An example of something
more complex:



**Can we apply
Newton's laws to
predict the motion
of the protein?**

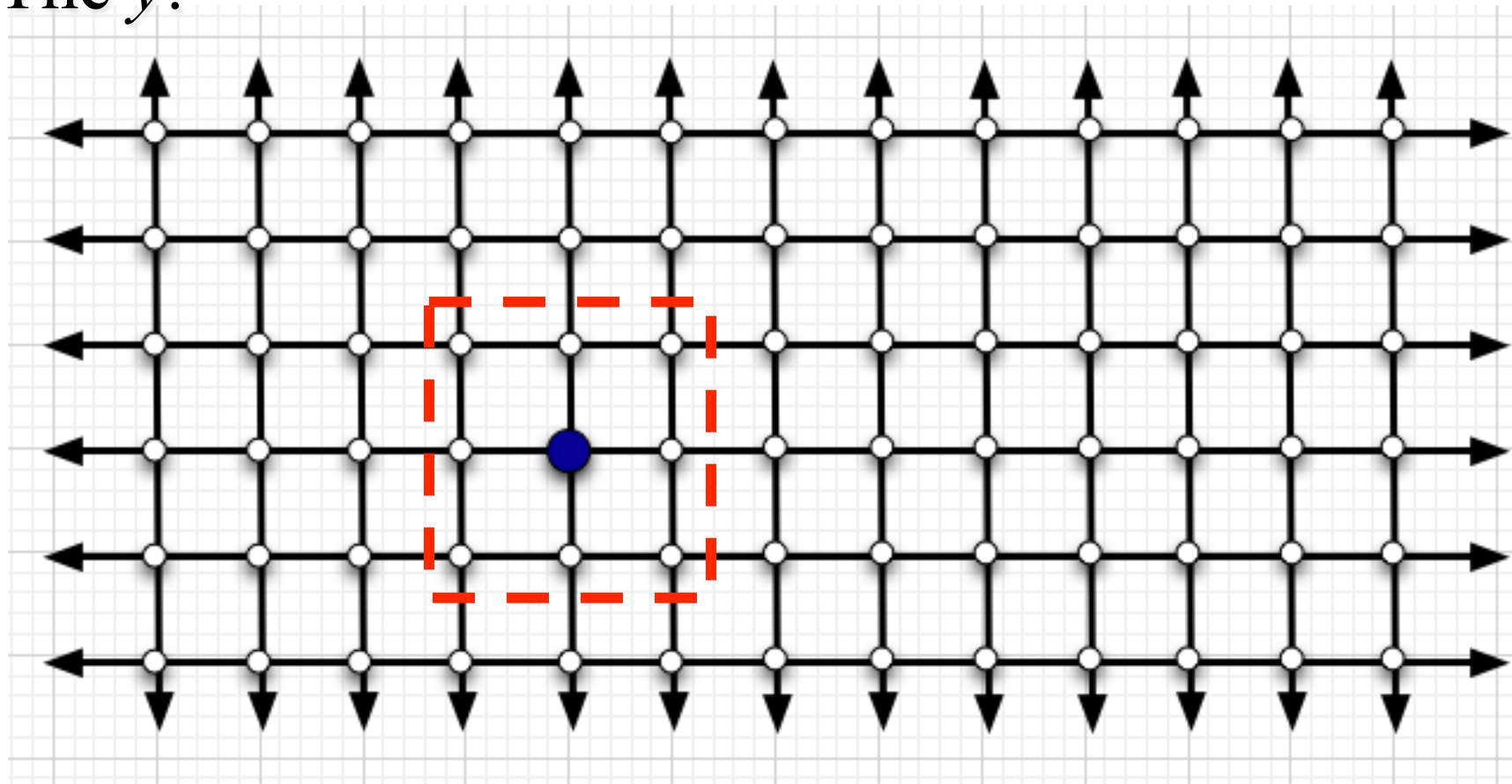
1. No
2. Yes
3. Depends

Blood clotting protein sitting on membrane

If the probability is equal that, in the next time step, the object moves to any one of the sites in the red box, what is the probability for the x -coordinate to change by: $+1$, 0 , or -1 ?



The y ?



If the probability is equal that, in the next time step, the object moves to any one of the sites in the cube. What is the probability for the x -coordinate to change by: $+1$, 0 , or -1 ? The y ? The z ? To wind up at any particular site in this cube?



- A. $1/2$
- B. $1/4$
- C. $1/8$
- D. $1/3$
- E. $1/9$
- F. $1/27$

